

## Reactions of arylenedioxytrihalophosphoranes with acetylenes 14. Methoxyphenylacetylenes in the reaction with 2,2,2-trichlorobenzo-1,3,2-dioxaphosphole

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### Abstract

© 2016, Springer Science+Business Media New York. Reactions of 2,2,2-trichlorobenzo-1,3,2-dioxaphosphole with 2-, 3-, 4-methoxyphenyl-, 3,4-dimethoxyphenyl- and 2,3,4-trimethoxyphenylacetylenes furnished 4-phenylbenzo-1,2-oxaphosphinine derivatives. The presence of one, two, or three donor methoxy groups in the aromatic ring of phenylacetylene does not change the general direction of the reaction which is characteristic of arylacetylenes and lead to 4-arylareno-1,2-oxaphosphinine derivatives. The presence of substituents in the exocyclic aryl group at ortho-position to the oxaphosphinine ring led to the appearance of atropoisomers.

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### Keywords

2,2,2-trichlorobenzo-1,3,2-dioxaphosphole, atropoisomerism, benzo-[e]-1,2-oxaphosphinine 2-oxides, chlorination of aromatic ring, formation of P—C bond, ipso-substitution of oxygen, methoxyphenylacetylenes